

plurality of different groups of words so that a limited number of groups of the entire vocabulary is searched via said comparing during speech recognition processes.

13. (New) The speech recognition system of claim 12, further comprising automatic word group generation means for automatically generating new groups of words for storage in said vocabulary when a number of words in or at a particular location in the vocabulary exceeds a predetermined threshold value. - -

REMARKS

This is in response to the Office Action dated December 21, 2000. New claims 11-13 have been added (only 10 claims were originally filed; note that in the preliminary amendment claims 8-11 were renumbered as claims 7-10). Thus, claims 1-13 are now pending. Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page/s is/are captioned "**Version With Markings To Show Changes Made.**"

It is initially noted that Applicant has not received an initialed Form 1449 from the IDS filed Oct. 12, 1999 (i.e., citing White 5,386,494; Torres 4,821,211; Goldstein 4,741,037; and EP 173 986). Thus, it is respectfully requested that the Examiner confirm consideration of this IDS and provide the undersigned with an initialed copy of the corresponding Form 1449.

Claims 1-10 stand rejected under 35 U.S.C. Section 102(b) as being allegedly anticipated by White. This Section 102(b) rejection is respectfully traversed for at least the following reasons.

Claims 1 and 12 require each of: (a) a voice activated word group selection system for enabling a user to speak via voice commands into the mobile telephone to select a first of said plurality of different groups of words, (b) words in the vocabulary arranged in a trellis structure comprising a plurality of different groups of words, and (c) the system in a mobile telephone. White does not disclose or suggest any of these elements of claims 1 and 12, let alone all three.

In contrast to claims 1 and 12, White teaches the selection of objects via a cursor and pointer. This is undesirable. In contrast, the voice activated systems of claims 1 and 12 enable the user to use speech/voice to select specific word groups thereby avoiding the need for pointers and the like which are undesirable in the context of mobile phones. Thus, in stark contrast to White, the instant invention enables fast access to different levels of options by using voice activation, without the need for cursors or the like.

White also fails to disclose or suggest storing the vocabulary in trellis structure as required by claims 1 and 13 (e.g., see the trellis tree-like structure in Fig. 1 of the instant application). Trellis storing of vocabulary has been found to be extremely advantageous, especially in the context of mobile phones where memory and other resources are limited. By using trellis storing structure, it has been found that the implementation and efficiency of a voice recognition system in a mobile phone may be greatly enhanced. White lacks any suggestion of the claimed trellis structure for storing vocabulary.

Finally, claims 1 and 12 require a mobile phone (e.g., cell phone). White fails in this regard as well. In contrast to claims 1 and 12, White's invention is in the context of a computer with big memory. Thus, there would be no reason for one to have modified White to meet the inventions of claims 1 and 12.

New claims 11 and 13 call for an automatic word group generation system for automatically generating new groups of words for storage in vocabulary when a number of words in or at a particular location in the vocabulary exceeds a predetermined threshold value. Again, White fails to disclose or suggest this aspect of this invention.

For at least the foregoing reasons, it is respectfully requested that all rejections be withdrawn and the application passed to issue.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

1. (Amended) A speech recognition system in a mobile telephone, the speech recognition system comprising:
a stored vocabulary, [characterized in that the] wherein words in the vocabulary are arranged in a trellis structure comprising a [number] plurality of different groups of words, and

a word group selection system for enabling a user to speak via voice commands to select at least a first of said plurality of different groups of words, said first group of words being selected based upon at least a word spoken by the user, so that a limited number of groups of the entire vocabulary, less than said plurality, is searched for a word [at each time] during subsequent speech recognition processes in the mobile telephone after selection of at least the first of said plurality of groups of words.

Please add the following new claims:

-- 11. (New) The speech recognition system of claim 1, further comprising an automatic word group generation system for automatically generating new groups of words for storage in said vocabulary when a number of words in or at a particular location in the vocabulary exceeds a predetermined threshold value.

12. (New) A speech recognition system in a mobile telephone, the speech recognition system comprising:

means for storing a word vocabulary in trellis tree structure, wherein words in the vocabulary are arranged in a plurality of different groups of words,

word group selection means for enabling a user to speak via voice commands into the mobile telephone to select a first of said plurality of different groups of words, said first group of words being selected based upon at least a word spoken by the user, and

speech recognition means for comparing input speech from a user to words in said selected first group of words, so that comparing of the input speech is performed relative to said selected first group of words prior to comparing the input speech with other of the plurality of different groups of words so that a limited number of groups of the entire vocabulary is searched via said comparing during speech recognition processes.

13. (New) The speech recognition system of claim 12, further comprising automatic word group generation means for automatically generating new groups of words for storage in said vocabulary when a number of words in or at a particular location in the vocabulary exceeds a predetermined threshold value. - -